

JAN 23 2007

Application No.: 10/616,537

Docket No.: TOW-032

REMARKS

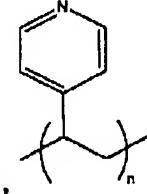
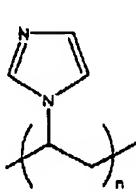
Claims 1-14 are pending in the application. No claims are amended, thus claims 1-14 will remain pending.

As a preliminary matter, Applicants would like to thank Examiner Weiner for her acknowledgement that claims 2, 3, 7-10 and 12-14 would be allowable if rewritten in independent format.

*Claim Rejections – 35 U.S.C. §102**Claim Rejections – 35 U.S.C. §103*

Claims 1, 4-6 and 11 have been under 35 U.S.C. §102(b) as being anticipated by or, in the alternative under §103(a) as being obvious over Zupancic *et al.* (U.S. Patent No. 4,664,761). As a preliminary matter and responsive to the Examiner's assertion that Zupancic teaches "the same solid polymer electrolyte comprising poly (vinyl alcohol)," Applicants respectfully point out that PVA is *not* a basic solid polymer, because it is generally *neutral or weakly acidic* in aqueous solutions. Moreover, Zupancic does not teach or suggest a "basic solid polymer ... wherein a material, which has at least one lone pair, is *dispersed in said base material*; and a mole number of said material per gram of said base material is less than 0.0014 mol" as provided by independent claim 1.

Zupancic, at best discloses an *interpenetrating polymer blend* that includes a host polymer and a guest polymer. The host polymer is a blend of "an acid selected from the group consisting of phosphoric acids or sulfuric acid" and an organic polymer, which can be, for



example, poly(N-vinylimidazole), *i.e.*,



The guest polymer includes a monofunctional monomer (*e.g.*, acrylamide, and a difunctional crosslinking agent. Zupancic makes it clear that "[a]n interpenetrating polymer

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network is more than a blend of two polymers... there is no chemical bonding between the host and guest polymers." (See, e.g., column 3, line 64 – column 4, line 1).

In the present invention, on the other hand, the lone pair material in the polymer solid electrolyte as presently claimed is formed *as a part of the base material*. That is, the lone pair material becomes part of the *same polymer system* as the base material. Accordingly, the polymers of the present invention would *not* be an interpenetrating network of polymers. Zupancic only teaches an interpenetrating network, and thus not the compositions which include a material having at least one lone pair *dispersed in the base material* as currently claimed.

Based upon the foregoing, Applicants submit that the present invention is neither anticipated by nor obvious over Zupancic. Accordingly, withdrawal of the rejection under 35 U.S.C. §102(b)/103(a) is respectfully requested.

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CONCLUSION

In view of the above, Applicants believe that the pending application is in condition for allowance. The Examiner is invited to contact the undersigned with questions or comments with regard to this application.

Applicants believe that no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. TOW-032 from which the undersigned is authorized to draw.

Dated: January 23, 2007

Respectfully submitted,

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